

WHAT IS CLAIMED IS:

1                   1.       A method of storing information in a data storage system comprising:  
2                   receiving said information;  
3                   writing said information to a first storage device in a plurality of storage  
4 devices;  
5                   during said writing to said first storage device, placing a second storage device  
6 in said plurality of storage devices in a state where it is ready to record said information;  
7                   writing said information to said second storage device, including ceasing  
8 writing of said information to said first storage device; and  
9                   subsequent to commencement of writing said information to said second  
10 storage device, placing said first storage device in a stopped state.

1                   2.       The method of claim 1 further including determining whether said  
2 second storage device can be placed in a state where it is ready to record said information and  
3 if not, then:  
4                   during said writing to said first storage device, placing a third storage device  
5 in said plurality of storage devices in a state where it is ready to record said information;  
6                   writing said information to said third storage device when it is ready to record  
7 said information, including ceasing writing of said information to said first storage device;  
8 and  
9                   subsequent to commencement of writing said information to said third storage  
10 device, placing said first storage device in a stopped state.

1                   3.       The method of claim 1 wherein said stopped state is a state in which a  
2 read write head of said first storage device is in an unloaded position.

1                   4.       The method of claim 1 wherein said stopped state is a state in which a  
2 rotating member of said first storage device is not rotating.

1                   5.       The method of claim 1 wherein said placing said second storage device  
2 in a state where it is ready to record is initiated after writing a first amount of information to  
3 said first storage device.

1                   6.       The method of claim 1 wherein said storage devices include magnetic  
2 disk devices or optical disk devices.

1           7.     The method of claim 1 wherein said storage devices are written in a  
2 ring structure manner wherein after writing to a last one of said storage devices, returning to  
3 said first storage device and overwriting information previously written thereto.

1           8.     The method of claim 1 further including recording to a third storage  
2 device that is separate from said plurality of storage devices, said recording including writing  
3 said received information to said third storage device or copying information stored in said  
4 first or second storage devices to said third storage device.

1           9.     The method of claim 8 wherein said third storage device is removable.

1           10.    The method of claim 8 wherein said third storage device includes a  
2 removable medium.

1           11.    The method of claim 8 wherein said third storage device is a magnetic  
2 disk, an optical disk, a magneto-optical disk, or a magnetic tape drive.

1           12.    An information storage system comprising:  
2 a plurality of storage devices; and  
3 a controller operatively coupled to said storage devices and configured to  
4 record information on said storage devices,  
5 said controller configured to perform first write operations of said information  
6 to a first of said storage devices,  
7 said controller configured to perform second write operations of said  
8 information to a second of said storage devices, including, during said first write operations,  
9 placing said second storage device in a state where it is ready to record information,  
10 said controller further configured to cease said first writing operations upon  
11 commencing said second write operations,  
12 said controller further configured to place said first storage device in a stopped  
13 state after commencing said second write operations, said stopped state.

1           13.    The system of claim 12 wherein said controller is further configured to  
2 determine whether said second storage device can be placed in a state where it is ready to  
3 record said information and if not, then to perform second write operations of said  
4 information to a third of said storage devices, including, during said first write operations,

5 placing said third storage device in a state where it is ready to record said information, and to  
6 place said first storage device in a stopped state after commencing said second write  
7 operations to said third storage device.

1 14. The system of claim 12 wherein each of said storage devices includes a  
2 read write head, said stopped state being a state in which said read write head is in an  
3 unloaded position.

1 15. The system of claim 12 wherein each of said storage devices includes a  
2 rotating member, said stopped state being a state in which said rotating member is not  
3 rotating.

1 16. The system of claim 12 wherein said placing said second storage  
2 device in a state where it is ready to record is initiated after writing a first amount of  
3 information to said first storage device.

1 17. The system of claim 12 wherein said storage devices are magnetic disk  
2 devices or optical disk devices.

1 18. The system of claim 12 wherein said storage devices are arranged in a  
2 ring buffer configuration, such that said information is written successively to each of said  
3 first through N<sup>th</sup> storage devices, where N is the number of said storage devices, and upon  
4 writing to said N<sup>th</sup> storage device, returning to said first storage device in a subsequent write  
5 operation.

1 19. The system of claim 12 further including a third storage device that is  
2 separate from said plurality of storage devices, said controller further configured to write  
3 information to said third storage device, said information being said information to be  
4 recorded or information copied from one of said storage devices.

1 20. The system of claim 19 wherein said third storage device is a  
2 removable medium.

1 21. The system of claim 19 wherein said third storage device is a magnetic  
2 disk, an optical disk, a magneto-optical disk, or a magnetic tape drive.

1                    22.     The system of claim 12 wherein each of said storage devices form  
2 RAID.

1                    23.     An information storage system comprising:  
2                    an input means for receiving information to be recorded;  
3                    a plurality of storage means for storing information; and  
4                    controller means, operatively coupled to said input means and to said storage  
5 means, for writing said information to a first of said storage means,  
6                    said controller means being configured to place a second of said storage means  
7 in a state ready to record information, while said information is being written to said first of  
8 said storage means,  
9                    said controller means configured to cease writing said information to said first  
10 of said storage means upon commencing writing said information to said second of said  
11 storage means,  
12                    said controller means further configured to place said first of said storage  
13 means in a stopped state, subsequent to commencing writing to said second of said storage  
14 means.

1                    24.     The system of claim 23 wherein said information comprises audio-  
2 visual content.

1                    25.     The system of claim 23 wherein said controller means is further  
2 configured to determine whether said second of said storage means can be placed in a state  
3 where it is ready to record said information and if not, then to perform second write  
4 operations of said information to a third of said storage means, including, during said first  
5 write operations, placing said third of said storage means in a state where it is ready to record  
6 said information, and to place said first of said storage means in a stopped state after  
7 commencing said second write operations to said third of said storage means.

1                    26.     The system of claim 23 wherein each storage means includes a read  
2 write head, said stopped state being a state in which said read write head is in an unloaded  
3 position.

1                    27.     The system of claim 23 wherein each storage means includes a rotating  
2 member, said stopped state being a state in which said rotating member is not rotating.

1           28.     The system of claim 23 wherein said plurality of storage means are  
2 arranged in a ring buffer configuration, such that said information is written successively to  
3 each of said first through N<sup>th</sup> storage means, where N is the number of said storage means,  
4 and upon writing to said N<sup>th</sup> storage means, returning to said first storage means in a  
5 subsequent write operation.

1           29.     The system of claim 23 further including an additional storage means  
2 for storing information, said additional storage means being separate from said plurality of  
3 storage means, said controller means further configured to write information to said  
4 additional storage means, said information being said information to be recorded or  
5 information copied from one of said storage means.

1           30.     The system of claim 29 wherein said additional storage means is a  
2 removable medium.

1           31.     The system of claim 29 wherein said additional storage means is a  
2 magnetic disk, an optical disk, a magneto-optical disk, or a magnetic tape drive.

1           32.     The system of claim 23 wherein said storage means comprises RAID  
2 devices.

1           33.     An audio-visual information storage system comprising:  
2 a plurality of storage devices; and  
3 a controller operatively coupled to said storage devices,  
4 said controller configured to receive audio-visual information containing audio  
5 content, visual content, or audio-visual content to be stored in said storage devices,  
6 said controller configured to perform first write operations of said audio-visual  
7 information to a first of said storage devices,  
8 said controller configured to perform second write operations of said audio-  
9 visual information to a second of said storage devices, including, during said first write  
10 operations, placing said second storage device in a state ready to record said audio-visual  
11 information,  
12 said controller configured to place said first storage device in a stopped state  
13 subsequent to commencement of said second write operations,

14           said controller configured to read out audio-visual information contained in  
15 one of said storage devices during said first or second writing operations, including placing  
16 said one of said storage devices in a state so that said audio-visual information can be read  
17 therefrom.

1           34.    The system of claim 33 wherein said controller is further configured to  
2 determine whether said second storage device can be placed in a state where it is ready to  
3 record said audio-visual information and if not, then to perform second write operations of  
4 said audio-visual information to a third of said storage devices, including, during said first  
5 write operations, placing said third storage device in a state where it is ready to record said  
6 audio-visual information, and to place said first storage device in a stopped state after  
7 commencing said second write operations to said third storage device.

1           35.    The system of claim 33 wherein each of said storage devices includes a  
2 read write head, said stopped state is a state in which said read write head is in an unloaded  
3 position.

1           36.    The system of claim 33 wherein each of said storage devices includes a  
2 rotating member, said stopped state is a state in which said rotating member is not rotating.

1           37.    The system of claim 33 wherein each of said storage devices includes a  
2 rotating member, said stopped state is a state in which said rotating member is not rotating.

1           38.    The system of claim 33 wherein said storage devices are magnetic disk  
2 devices or optical disk devices.

1           39.    The system of claim 33 wherein said storage devices are arranged in a  
2 ring buffer configuration, such that said audio-visual information is written successively to  
3 each of said first through N<sup>th</sup> storage devices, where N is the number of said storage devices,  
4 and upon writing to said N<sup>th</sup> storage device, returning to said first storage device in a  
5 subsequent write operation.

1           40.    The system of claim 33 further including a third storage device that is  
2 separate from said plurality of storage devices, said controller further configured to write said  
3 audio-visual information to said third storage device, said audio-visual information being said  
4 information to be recorded or information copied from said storage devices.

1                    41.    The system of claim 40 wherein said third storage device is a  
2 removable medium.

1                    42.    The system of claim 40 wherein said third storage device is a magnetic  
2 disk, an optical disk, a magneto-optical disk, or a magnetic tape drive.

1                    43.    The system of claim 33 wherein each of said storage devices form  
2 RAID.